

Appn. S/N 10/014,535
Amdt. dated August 5, 2005
Reply to Office Action dated May 5, 2005

REMARKS/ARGUMENTS

Applicant requests that the application be amended as above described.

Claim Rejections - 35 USC 102(b)

The Examiner rejected claims 1-5 and 10 under 35 USC 102(b) as being anticipated by EP Patent Application No. 0720328A1 (Maebara). Applicant respectfully disagrees, and traverses the Examiner's rejection based on the fact that Maebara does not disclose or suggest an encryption system that modulates data.

The claimed invention is directed to an encryption system that includes a transmitter for modulating data with a pseudo-random signal, which is then sent over a transmission medium. Any person of skill in the art will understand that modulation is employed in analog signal transmission, which includes for example, optical transmission through a fibre optic cable and wireless transmission through air. Modulation is the process by which a signal waveform is modified to carry data. The description of the present application discusses signal modulation. More specifically, the description at page 5, lines 1-14 with reference to Figure 2, discusses that a data signal waveform 200 is modulated with a noise signal waveform 210, both having frequency and amplitude characteristics. The resulting addition of waveforms 200 and 210 produces a modulated waveform signal 220.

For further clarity, a definition of "modulation" is excerpted from page 1-2 of the Mobile Communications Handbook ("The Mobile Communications Handbook", Jerry D. Gibson, 2nd edition, CRC Press & IEEE Press, p 1-2, 1999):

"Modulation is the process of imparting the source information onto a bandpass signal with a carrier frequency f_c by the introduction of amplitude and/or phase perturbations."

Therefore, the teachings of signal modulation in the present application are clearly consistent with the above excerpted definition.

Appn. S/N 10/014,535
Amdt. dated August 5, 2005
Reply to Office Action dated May 5, 2005

In contrast, Maebara is directed to a technique for enciphering digital data. Maebara teaches that a digital data signal (DA) consisting of a series of bits represented as logical 1's and 0's, can be masked by adding a random number of additional bits (α) to the data signal and then enciphering the new data (DA, α) with any well known encipherment algorithm. Column 8, lines 5-17 of Maebara then states that this enciphered signal is output as a signal (DA, α '), which is then received by a receiving device for de-encipherment. Various embodiments taught by Maebara discuss the position of the additional bits relative to the data signal (DA), and that more than one additional set of bits can be added to the data (DA). Nowhere does Maebara disclose, teach or suggest modulation of any signal, let alone the data signal, with a pseudo-random signal, as recited in the claims of the present application.

Applicant takes the opportunity to clarify that encipherment of data as described in Maebara, is not analogous to modulation of data, as recited in the claims. Those skilled in the art will understand that encipherment is an encryption process whereby the original bits of data are re-arranged according to specific steps of an algorithm in order to hide the original data information. As previously discussed, modulation is a well defined process of modifying a signal waveform to carry data, by amplitude and/or phase perturbations. Maebara does not perform a function upon the data that resembles, in any way, modulation of data as presently claimed.

Therefore, Applicant submits that claims 1 and 10, and claims 2-5 which depend from claim 1, are not anticipated by Maebara, as Maebara fails to disclose, teach or suggest a transmitting device that modulates data with a pseudo-random signal. Therefore, withdrawal of the Examiner's rejection under 35 USC 102(b) is respectfully requested.

Claim Rejections - 35 USC 103

The Examiner rejected claims 6-9 under 35 USC 103(a) as being obvious in view of Maebara and U.S. Patent No. 5,778,069 (Thomlinson et al.).

The Applicant has previously argued that claims 1-5 and 10 are not anticipated by Maebara. Therefore, in view of the novelty of claims 1-5 and 10, Applicant submits that claims 6-9

Appn. S/N 10/014,535
Amdt. dated August 5, 2005
Reply to Office Action dated May 5, 2005

cannot be obvious in view of Maebara and Thomlinson et al., since the combination thereof does not disclose an encryption device having a transmitting device that modulates data with a pseudo-random signal. Therefore, withdrawal of the Examiner rejection of claims 6-9 under 35 USC 103(a) is respectfully requested.

Therefore, Applicant submits that the application is now in condition for allowance, and favorable action to that end is respectfully requested.

Respectfully submitted,

Barbir ABDULKADER

By:


Shin Hung
Reg. No. 55,497
Borden Ladner Gervais LLP
World Exchange Plaza
100 Queen Street, Suite 1100
Ottawa, ON K1P 1J9
CANADA
Tel: (613) 787-3571
Fax: (613) 787-3558
E-mail: shung@blgcanada.com

SHH/ats